



Engineering Industry Sector Guide

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Sector Guide – Overview of the Engineering Sector

Nearly 5.7 million employees work in engineering enterprises in the UK, representing just over 19% of total UK employment in all registered enterprises. As a proportion of total employment, this has remained relatively consistent for the last three years.

It has been forecast that engineering employers will need to recruit 265,000 skilled entrants annually to meet demand for engineering enterprises through to 2024, this figure has increased drastically from last year's forecast of 182,00.

It is estimated that engineering contributed £486 billion to UK GDP in 2015 – around 26% of the total and representing 2.3% growth since 2014. Source:

http://www.engineeringuk.com/media/1356/enguk_report_2017_synopsis.pdf

According to The Engineer's 2018 Salary Survey, the average salary for all engineers is £47,896, a slight decrease on last year's survey average of £48,197. The average salary in the oil and gas sector, the highest-paid sector in engineering, is £53,900.

The Engineer Salary Survey 2018 –The average salary for all engineers in 2018 is £47,896, a slight decrease on last year's average of £48,197. This compares reasonably well with other professions in the UK, sitting below those in strategy and consultancy on £57,554, qualified accountants on £53,887, and those in banking on £52,666, but above those in financial services on £47,250.

The full survey results can and report be viewed here: <https://www.theengineer.co.uk/engineer-salary-uk-2018/>

Who are the major employers?



SIEMENS

THALES



CAF

AIRBUS



e.on



Who are the major employers?



Jaguar Land Rover JLR work closely with CTP to promote vacancies to Service Leavers and regularly attend events. JLR are seeking staff within product development which includes research, engineering, project management, quality and design. There are also engineering and supervisory roles in developing and manufacturing the motor engines, as well as various skilled trade roles, quality, logistics and engineering in the manufacture of the whole car.



Honda Opened in 1985 and currently employing over 3,300 Associates, the plant in Swindon is Honda of the UK Manufacturing Ltd (HUM). Producing around 120,000 cars a year, it is the global production hub for the five door Honda Civic models. They also make the CRV and a range of diesel and petrol engines for other factories around the world. HUM is Honda's flagship production facility in Europe, playing an important part of the global manufacturing operations. The company recently announced a £200 million investment in HUM to develop the facility into the global production and plan to attract new people to the team <http://www.hondamanufacturingcareers.co.uk/index.php>



Nissan Currently employs more than 4500 staff and the plant in Sunderland was extended in late 2015 to accommodate production of the Infinity Q30



BMW employs 19,000 staff in the UK manufacturing and across the dealer network. It has also seen major increase in sales in the past couple of years resulting in more apprenticeship and experienced engineer roles including the mini plant based in Swindon and the Rolls Royce site in Chichester. <https://www.bmwgroup.com/en/careers.html>



Airbus directly employs 13,000 staff in the UK and many more through the supply chain. Airbus Wing Work employs staff at Filton working on the design, engineering and support of Airbus wings, fuel systems and landing gear. Assembly takes place at the Broughton site which recruits for manufacturing and engineering roles. <http://www.airbus.com/work/>



Boeing is a major manufacturer of commercial jetliners. Boeing Defence, Space and Security produce communication systems for military and government customers. Boeing directly employs 1700 staff throughout the UK, along with many more subcontractor staff. Boeing recruit for a wide variety of roles including design, planning, and service engineers, systems engineers, quality and project managers. <https://jobs.boeing.com/category/engineering-jobs/185/11125/1>



GKN Aerospace employs around 12,000 staff and their Bristol site produces parts for both Airbus and Boeing. They also operate sites in Portsmouth, Isle of Wight and Yeovil. <http://www.gkn.com/aerospace/careers/Pages/default.aspx>



Rolls Royce employs 16,000 staff in the UK, manufacturing engines for the civil and defence market and the growing nuclear business. Rolls Royce recruit engineers from all disciplines of electrical, electronic, instrumentation and sensor engineering to specify, design, develop, test and support control, instrumentation and protection systems and equipment. <http://www.rolls-royce.com/careers.aspx>



BAE Systems design and manufacture fixed wing combat and training aircraft for the UK and overseas defence market, and are currently working on the Typhoon fleet. They have ongoing recruitment requirements across sites, mainly in Warton, and RAF Conningsby for engineers across a range of disciplines. <https://www.ctp.org.uk/job-finding/directory/bae-systems/latest-jobs>

Skills, Qualifications & Training

Skills and Qualifications

Many Service leavers seeking employment within engineering will have completed an engineering apprenticeship or have some form of relevant experience gained through the Armed Forces. This experience is often accredited and most Service leavers will have a civilian recognised qualification. The IET and IMECHE (see below) will assist Service personnel in identifying how their experience relates to civilian qualifications and work towards professional recognition awards.

There are opportunities for Service leavers without an engineering background to enter the industry, through an apprenticeship scheme with an Employer, through a local college, or alternatively through short resettlement courses which provide recognised civilian qualifications. For those without industry experience, it is always recommended that a period of work attachment be completed with a potential employer, in order to put into practice the skills gained during training.

Organisations who can assist with identifying training routes and professional recognition include:

SEMTA <http://www.semta.org.uk/careers>

The Sector Skills Council for Science, Engineering and Manufacturing Technologies are an Employer led organisation who work with companies to identify skills gaps and opportunities to increase productivity, particularly through training and apprenticeships

IET <http://www.theiet.org/armed-forces/>

The Institution of Engineering and Technology provide advice and guidance to those in the industry and those considering a career within engineering. The IET have a membership scheme and Service personnel can be advised on career progression as well as relevant qualifications and professional recognition in the industry.

IMechE <http://www.imeche.org/membership-registration/become-a-member/armed-forces-and-mod>

The Institution of Mechanical Engineers host workshops, seminars and various events throughout the UK and also offer a membership scheme with professional recognition routes to become an Engineering Technician or Incorporated or Chartered Engineer.

SoE <http://www.soe.org.uk/join-soe/case-studies/engineers-in-the-armed-forces/>

Society of Operations Engineers (SOE) represents over 3,000 individuals employed within the Armed Forces. They Support engineering professionals and provide training programmes across the Army, RAF and Royal Navy

Skills, Qualifications & Training

Training

A Craftsperson or Advanced Craftsperson

Will normally have completed an engineering apprenticeship and will undertake day to day semi-skilled maintenance activities. Individuals would have training in electrical or mechanical crafts, control and instrumentation or plant and process.

This is likely to include an Engineering Technician / Leading Engineering Technician / Marine Engineering Mechanic from the Royal Navy; Aircraft Technician/SAC/Weapon Technician or General Technician/Cpl from the RAF or Lance Corporal/Craftsman REME/Sapper from the Army.

An Engineer

Will generally have an HND or Foundation Degree in an Engineering discipline, and a Health and Safety qualification such as IOSH.

The engineer will be responsible for engineering maintenance and may be a technical specialist. They would be responsible for day to day maintenance and also overhauls, projects and modifications. They would be a logical / analytical thinker with problem solving skills, and may have some finance or budget responsibilities.

This is likely to include Chief Petty Officer /Warrant Officer Engineering Technicians from the Royal Navy; Chief Technician / Flight Sergeant /Warrant Officer from the RAF or a Staff Sergeant or Warrant Officer from the Army.

An Engineering Manager

Will often have an Engineering Degree, a substantial Health and Safety qualification such as NEBOSH and a Business Management qualification.

CTP Training

Below is a selection of the many courses that CTP has to offer for this industry, please contact your career Consultant or the Central Booking and Information Centre for more information.

CIV 02894 456200 or Mil: 9491 56200

Email: coursebookings@ctp.org.uk

Engineering Based Courses

For a full list please follow the link <https://www.ctp.org.uk/resettlement-training/>

- [Domestic Electrical Installation Full Scope](#)
- [IEE 18th Edition Wiring Regulations](#)
- [Level 3 Award in Inspection and Testing](#) – 8 days
- [L3 Diploma in Gas Utilisation and ACS Assessments Phase](#) - 35 Days + work attachment
- [Programmable Logic Controllers](#)
- [Air Conditioning & Refrigeration Technology](#)



CTP also offer a range of related training courses relevant to certain Engineering Management positions:

- [Prince 2](#) – 5 days
- [APM Project Management](#) – 10 days
- [NEBOSH General Certificate](#) – 15 days
- [NEBOSH Environmental Management](#) – 6 days
- Lean Six Sigma (Green Belt Foundation)- 5 days
- NEBOSH General Certificate- 15 days
- Finance for non-Financial Managers- 2 days
- Potential Facilities Manager- 10 days
- BIFM Facilities Management L4 Award- 5 days

There are several CTP Preferred Suppliers who also offer relevant training for those considering trades such as HVAC, Plumbing, Gas and Electrical. Other suppliers may provide training towards a career in renewables, railway, signalling, locksmiths, marine engineering and oil and gas. <http://www.ctp.org.uk/preferred-suppliers>

News and Trends

Plymouth Sound to become proving ground for autonomous marine vessels

Plymouth Sound is to become a proving ground for autonomous marine vessels following the installation of a sensor system with artificial intelligence (AI) machine learning technology.

Nissan scraps plans to build new X-Trail in Sunderland

Nissan has announced that the next-generation X-Trail for the European market will be produced in Japan and not in Sunderland, as announced in 2016.

Light based 3D printer shapes custom objects from liquid resin

A 3D printing technique that uses patterns of light to transform viscous liquids into solid objects has been demonstrated by researchers at the University of California, Berkeley

£18m funding to “transform” UK construction sector

An £18m investment in technologies ranging from augmented reality design tools to swarming robots that mimic the collaborative behaviour of termites could help transform UK construction, the UK’s main research funding body has claimed.

Automotive industry urges politicians to steer clear of ‘no deal’ Brexit

With car production falling to its lowest level for five years, politicians are being urged by UK automotive companies to ‘do whatever it takes’ to avoid a no deal Brexit.

MOD invests £1m in ‘wrapped-rib’ satellite technology

UK space technology firm Oxford Space Systems (OSS) has received £1m investment from the MOD (Ministry Of Defence) to help develop a new generation of deployable satellite antennas.

Unwieldable alloy makes connections with automotive industry

Engineers have developed a way to weld AA 7075, an aluminium alloy that is nearly as strong as steel and one-third the weight but almost impossible to join with heat.

News and Trends

Demand for engineering skills is set to increase over the coming years with the requirements for advanced technology as well as significant investment in the nuclear industry and renewable energy. Technology is constantly evolving and the demand for skilled technicians (those with level 3 qualifications or above) is expected to continue to increase. With new technology brings new skill requirements and so in more cases engineers are required to be multi-skilled. Those with an existing electrical or mechanical engineering background can skill up into areas such as renewables (wind turbines, solar panelling etc.), or towards information and communication technology, environmental sustainability or nuclear power.

News Headlines:

Virtual cockpit adds operational realism to UK military's new high-G centrifuge

- [Read More](#)

Salary Survey | 2018

- [Read More](#)

Vivarail set for UK trials of modular hydrogen train

- [Read More](#)

£18m funding to "transform" UK construction sector

- [Read More](#)

UK public express apprehension and fear over autonomous cars

- [Read More](#)

Engineering needs immigration: The industry will fail without workers from abroad

- [Read More](#)

Boeing's autonomous passenger air vehicle makes maiden flight

- [Read More](#)

Latest Vacancy Information: 2018



Job ID	Job Title	Location	Closing Date
<u>226976</u>	Commercial Catering Engineers	National Roles	22/02/2019
<u>245716</u>	Welder/Fabricator	Somerset	28/02/2019
<u>250816</u>	Craft Apprentice (Electrical Engineering)	East Midlands	28/02/2019
<u>249475</u>	Engineering Technician	Wigan	03/03/2019
<u>249976</u>	Machinery Engineer Surveyor	Bournemouth	05/03/2019
<u>251795</u>	Deputy Engineering Managers	London	17/03/2019
<u>252246</u>	Design Engineer	South West	19/03/2019

Remember to check [RightJob](#) regularly for new opportunities

Useful Links

<http://www.theengineer.co.uk>

<http://www.energyvoice.com>

<http://www.engineeringuk.com>

<http://www.ecia.co.uk>

<http://careers.ecitb.org.uk>

<http://www.ctp.org.uk/job-finding/directory>

<https://nationalcareersservice.direct.gov.uk/advice/planning/jobfamily/pages/manufacturingengineering.aspx>